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AUTHOR	Quatroche, Thomas J.
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ABSTRACT

Student pressures for institutional change have become a major influence in American higher education and if colleges are to provide educational experiences appropriate to the particular students they attract, knowledge about the varieties of orientation and inclination of their students is important. The focus of this study was on the small college and the purpose was to identify, within the institutions of higher education investigated, the perceptions and attitudes of different types of students toward institutional functioning and institutional response to change. The study also sought to identify those factors that influence the kinds and degrees of student pressures for change, and the variation of institutional response to such pressures for change in 3 specific areas of student concern most distinguishable on campuses today. These areas are changes in curriculum, governance, and student life. The Clark-Trow Typology of College Student Subcultures and the Peterson Student Typology of College Students were the means used in the investigative process. The results are presented in both discussion and tabular format. (HS)

ED 067053

Differences in Perceived Institutional Functioning and Responsiveness to Change as Related to Types of Students in Selected Four-Year Colleges

Thomas J. Quatroche
SUNY College at Buffalo

Introduction and Background

This investigation is part of the larger exploratory study--"Response of Four-Year Colleges to Student Pressures for Change." (Jurbach & Flexner, 1970) The focus of this study, as in the parent study, is on the small college.

In the years since the development of the "Free Speech Movement" at Berkeley, American colleges and universities have witnessed an unprecedented number of campus protests, some organized and others largely spontaneous. While much has been written about student disruptions in large universities such as Berkeley, Columbia, Cornell, and Harvard, there is very little in the literature about student discontent in the small college.

Peterson (1968) notes that since 1964-65 increasing numbers of college students representing a much wider cross-section of the student body were becoming involved in campus protests. Much of this student discontent can be attributed to fundamental dissatisfaction with the traditions, the structure, and the very roots of the established society. While many of the issues were external to the campus--the Viet Nam war, militarism, civil rights, and the like; many other issues were internal to the campus. In loco parentis, parietal rules and regulations, stringent

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academic and curricular requirements, and centralized university governance--all have been seriously challenged.

As a result of the pressures students have exerted upon American universities, there has developed a growing recognition of the need for greater student participation in the learning process, coupled with a better understanding of extra-curricular interests, which in turn, has led to a heightened concern for student rights and academic freedom. In particular, student interest and concern with internal campus issues such as the decision-making process in curricular matters, student affairs, off-campus life, disciplinary proceedings and campus governance has increased markedly and are of central concern to students in colleges and universities today (AAUP, 1967 & Sindler, 1967).

In short, student pressures for institutional change have become a major influence in American higher education and if, as Warren (1968) suggests, colleges are to provide educational experiences appropriate to the particular students they attract, knowledge about the varieties of orientation and inclinations of their students is important.

The Purpose of the Study

The purpose of this aspect of the study has been to identify, within the institutions of higher education investigated, the perceptions and attitudes of different types of students toward institutional functioning and institutional response to change. The study also sought to identify those factors that influence the kinds and degrees of student pressures

for change, and the variation of institutional response to such pressures for change in three specific areas of student concern most distinguishable on campuses today--changes in curriculum, governance, and student life.

Conceptual Framework

The conceptual framework underlying this investigation is concerned with the social diversity of student populations as they affect the college environment and are affected by that environment.

In an investigation of student populations, it is desirable to contrast types or to classify students according to certain selected dimensions. In this regard, Gottlieb and Hodgkins (1963) indicates that the classification of student groups into what is commonly known as student subcultures or student types has developed from the recognition that there is an interaction between the college community (which has a distinctive value orientation) and that which is held by students upon entrance to college.

The Clark-Trow Typology of College Student Subcultures

Perhaps the most widely known and extensively applied conceptual schemea for describing types of students is that developed by Clark and Trow, 1960. Their typology is based upon four types of student subcultures which are labled as Vocational, Collegiate, Academic and Non-Conformist. Specifically, the Clark-Trow Typology is concerned with two variables and these subcultures emerge analytically from a combination of two factors: "(A) the degree to which students are involved with ideas, and (b) the extent to which students identify with their college" (Clark, 1962, p. 210).

According to Clark, the relationship between the subtypes can be described diagramatically as follows:

	Involved with ideas +	Involved with ideas -
Identify with College	Academic	Collegiate
	Non-Conformist	Vocational

The subcultures "are systems of norms and values which overlap and flow into one another in different types of colleges; they are reflected in individuals in various blends" (1962, p. 210).

The Peterson Student Typology of College Students

In 1968, Richard Peterson developed a typology for classifying students which is used in this study. While based on the original Clark-Trow model, Peterson further refines these student types. He indicates that "given an open, mass educational system, the diversity in student characteristics is extremely great" (p. 299) and for this reason, a more refined classification is needed to account for the types of students found in American colleges in the late nineteen sixties and in the nineteen seventies.

The Peterson typology of college students "consists of eight student types distinquishable in terms of their dominant value commitment" (Peterson, 1968, p. 299). Peterson (p. 296) sees his student types as arranged along a continuum reflecting the degree to which these types accept or reject prevailing American institutions in the following manner:

Stance vis-a-vis American Institutions

Acceptance		Neutral			Rejection
Vocationalists Professionals	Collegiates	Ritualists	Academics	Intellectuals	Left-Activists Hippies

This classification refers to analytic, ideal types which are "largely inferential and speculative" and oversimplified abstractions that "mask the huge variability in many dimensions that unquestionably exist within each type" (Peterson, p. 299). The types of students developed by Peterson more clearly differentiate the complexity of student values and behavior than did the earlier Clark-Trow types. This is particularly true of the differentiation of the non-conformist type into left-activists and hippies, but also in distinguishing between vocationalists and professionalists and between academics and intellectuals, as well as the introduction of the ritualists, the non-committed type. Finally, the placement of these types along a continuum makes the typology more useful for the further analysis of student perceptions of institutional functioning and responsiveness to change.

Institutional Vitality and Functioning

More than ever, institutions of higher education in the 1970's must demonstrate the "vitality" necessary to respond to changing intellectual needs of their students, their communities, and the times. Colleges and the universities of today cannot be effective for long without remaining adaptive to new conditions (Hefferlin, 1969). In response to national concern regarding how colleges and universities can respond to

this need for internal change, Earl J. McGrath and two of his associates, Dr Lon Hefferlin and Hans Flexner, conducted an extensive study of institutional change and reform in higher education. This research contributes substantially to the development of the concept of "institutional vitality". Institutional vitality as developed in that study includes the capacity of an institution to grow and to adapt to new social demands, and was "concerned with the capacity of an academic enterprise continuously to reorganize its program and to redistribute its resources in such ways as to encourage the most promising innovations in the theory and practice of higher education" (Hefferlin, 1969, p. x). In short, for American colleges and universities to be vital, a concerted effort must be made to change purposes and practices of educational objectives according to the changing character of American society and emerging educational needs.

Some time later, McGrath and his associates entered into discussions with the Educational Testing Service (ETS) in Princeton, to consider the conceptual efforts already made and to discuss possible new ideas and approaches. During these conferences, some expressed the view that the word "vitality," with its emotional overtones, might better be replaced by the neutral concept, institutional <u>functioning</u>. The manner in which an institution functions would, however, be a reflection of its vitality (Peterson, 1970, pp. 3-4).

Institutional Functioning was seen as consisting of eleven dimensions--(IAE) Intellectual-Aesthetic Extracurricular, (F) Freedom, (HD) Human Diversity, (IS) Improvement of Society, (UL) Undergraduate Learning, (DG) Democratic Governance, (MLN) Meeting Local Needs, (SP) Self-Study, Planning,

(AK) Advancing Knowledge, (CI) Concern for Innovation, and (IE) Institutional Esprit (Peterson, et.al., 1970). The first six of the above dimensions are specifically related to assessing student attitudes and perceptions of institutional functioning as perceived by the students themselves.

Institutional Functioning, then, is seen as providing a conceptual framework for examing how students perceive the characteristics of and capacity for change within their particular institution.

Student Pressures for Change

There is a sense of disenfranchisement among students on college campuses today, a frustration and discontent that has its roots primarily in the American society. Many of the campus issues since the early 1960's have been concerned with the continued existence of racial injustice in the United States, the presence of severe poverty among some American citizens, and the participation of American military forces in Southeast Asian conflicts. Further dissatisfaction, as noted by Freedman, arises among college students from a feeling that the education they are receiving is preparing them "to fit into a society they reject, at least in considerable part" (1967, p. 173). However, much of the student discontent as noted earlier (AAUP, 1967 & Sindler, 1967) indicate that students have become increasingly concerned about the extent to which they have been allowed to participate in university policymaking, particularly in those areas that govern their educational experiences.

The sources of recent discontent among college students has ranged from the absence of a student role in disciplinary cases (which occurred at Columbia University in 1968, to cite an example) to general discontent

with the relevance of the curriculum and mistrust of the institution because of the lack of student representation in university governance. The Muscatine Report (Education at Berkeley, 1968) as well as, the Hazen Foundation Report (The Student in Higher Education, 1968) quite clearly outline and recommend goals and objectives for universities in responding in a positive manner to areas relevant to student concerns and pressures for change. Flexner (1969) attributes a good part of student discontent to "institutional inadequacies manifested in unimaginative educational programs, and not infrequently, in disregard for significant student involvement in the process by which decisions affecting them are made" (p. 235).

Along similar lines, the President's Commission on Campus Unrest (1970) indicates that, the university, and the faculty in particular, must recognize the expansion of higher education and the emergence of a new youth culture has changed both the makeup and concerns of today's student population and that the university will have to adapt to these new conditions (p. 3).

Students are now putting immense new pressures upon universities, and the adequacy of the response of these institutions to these pressures may determine, in time, the ability of those institutions to function as learning environments. Hefferlin (1969) argues that a vital educational institution "must be responsive to the changing intellectual needs of its students, its community, and its times. It must be able to adapt its policies and practices to keep its means consistent with its end. In order to progress, it must change" (p. xviii).

A major concern of this study, then, is with student perceptions of

how and to what extent their colleges are responding to specific institutional change that students across the nation are requesting. Three specific areas of student concern and pressure for change appear to be most distinguishable on campuses today--changes in curriculum, governance, and student life. The first of these areas of student concern has to do with major curricular changes, such as reform in the system of grading or modification of academic requirements. Requests for increased independent or non-directed study, and increased work-study opportunities are other examples which could be included in this general category of student requests. The second area includes changes toward greater student participation in the governance of the institution. The most significant example of this type of pressure today revolves around students' claims for representation on boards of trustees and faculty senates. The third area relates to student demands for increased control over their own lives in non-academic (social) matters on and off campus. Most requests of this nature are directed toward relief from in loco parentis rules involving housing arrangements, dormitory hours, co-educational living, intervisitation regulations, entertainment and speakers on campus, and relationships between the sexes. This study examined how different types of students perceived the way that their institutions would respond to student requests for internal change, both in terms of degree and time dimension; the extent students would participate in the processes of consideration and decision-making; the type of activity in which the students would have to engage in order for the institution to respond; and, behavior of the institution toward the student leaders who initiated change.

In summary, the conceptual basis for this study drew upon the typology

developed by Peterson as a basic framework for describing student values and orientations. The typology in turn provided a conceptual framework for analyzing how different types of students perceive the characteristics of and capacity for institutional change, as conceived by McGrath and his associates, and as modified by the study of institutional functioning conducted by the Educational Testing Service. Secondly, the Peterson typology provided a framework for analyzing how different types of students perceive the responsiveness of their institutions to student requests for internal change in the areas of grading, student participation in institutional governance, and control of non-academic aspects of student life.

Methodology and Procedures

Instruments

The Peterson typology instrument presents the respondent with eight paragraphs each of which describes, but does not identify by name, the eight types described by Peterson. The respondent is asked to indicate the paragraphs which fit most closely his own value orientation, selecting his first, second, and third choices. Only the first choice was used in the analysis which follows.

The IFI consists of six sets of twelve questions, each reflecting a dimension of institutional functioning. Mean scores on each of these dimensions were calculated by student type and by institution and provided the basis for analysis reported here.

The SPIR instrument consists of six questions about each of three hypothetical situations concerned with curriculum, governance, and student life. Six scales were developed consisting of the responses to each one of these questions in all three hypothetical situations. The scales reflect

the students perception of how their institution responds to student pressures for change. The scales deal with perceptions of: (1) the nature of the response (Consideration); (2) the time taken to respond; (3) the extent student and faculty participate in discussion; (4) the extent of student and faculty participation in decision-making; (5) the type of action by students necessary to get a decision; and (6) the response of the institution to student activism. The mean scale score were obtained by type of student and by institution and were used in the analysis reported below.

Sample Population

The population sampled for this study were undergraduate students attending three four-year colleges in Pennsylvania selected because they reflect a relatively wide-range of institutional settings. The three institutions will be referred to as Ivy College, State College and Coalton College. Ivy is a private, academically selective institution with a long liberal, arts and science tradition. State College is a state-supported liberal arts college still strongly emersed in its former status, that of a teachers college tradition. Coalton is a private, liberal arts institution located in a relatively small city and has a large commuting population. The estimated student population was 1400 students randomly selected from the sophomore, junior, and senior classes in the three institutions. The total response from usable questionnaires returned from each college was: a 48% response (155 full-time students) at Ivy College; a 37% response (183 full-time students) from Coalton College; and, a 63% response (317 full-time students) from State College.

Collection of Data

The research questionnaire with a letter of introduction describing the investigation was distributed to the students involved in this investigation during the Fall of 1970 from the President or Academic Dean of each of the three institutions. The questionnaires were distributed and collected by the Dean of Student's Office at the appropriate institution. Responses to the questionnaire were anonymous. In addition, a follow-up questionnaire and letter from the President was distributed in the Spring of 1971 to the original sample urging the cooperation of non-respondents.

Research Questions

The specific research questions posed in this investigation are to identify within the institutions investigated, the perceptions and attitudes of different types of students toward institutional functioning and institutional response to student pressures for change.

1. Do different types of students, as determined by their responses to Peterson's typology, perceive differently various dimensions of institutional functioning as revealed in their responses to the IFI?

2. Do different types of students, as determined by their responses to Peterson's typology, perceive differently institutional response to student pressures for change as revealed in their responses to SPIR?
3. Are there differences between the institutions under investigation in terms of student perception of institutional functioning at their institutions as revealed by their responses to the IFI?
4. Are there differences between the institutions under investigation in terms of student perceptions of institutional response to student pressures for change as revealed by their responses to the SPIR?

Procedures for the Statistical Analysis

The primary objectives of this exploratory study were to determine relationships between the two independent variables--(1) Peterson's Student Typology, and (2) the three institutions involved in the investigation (State College, Ivy, and Coalton Colleges), and the dependent variables, (1) the IFI, and (2) the SPIR. The purpose of the analysis was to determine if a significant statistical relationship exists between the independent variables and the dependent variables.

Data Analysis

Mean student scores on the IFI and SPIR items were compared, by student type and by institution, to determine the nature of any relationships which may exist between the variables.

In addition to the above comparison, a one-way analysis of variance was applied to the data to determine if there are significant differences, at the .05 level of confidence, (.01 level of confidence reported if higher), between the mean student IFI and SPIR scores: (A) by student type; (B) by institution.

Results of the Study

The responses to the Peterson's Typology of College Students (Table 1) indicated that the largest proportion of the respondents (33%) most closely identified themselves with Student Philosophy C (Collegiate). The combination of Philosophies A (Vocational), B (Professional) and C (Collegiate) were selected as first choice by 68% of the total student sample. These philosophies are the types which, according to Peterson, reflect the prevailing American traditional values. Conversely, those types which reject prevailing American traditional values accounted for only 22% of the primary choices of students in the sample, i.e., those who most closely identified with Philosophies E (Academic), F (Intellectual), G (Left-Activist), H (Hippie). Students who classified themselves as Ritualist (middleroad) Philosophy D, accounted about 10% of the student sample. Further analysis of the Student Philosophy response patterns at the three institutions indicates that primary responses to the most non-conforming Philosophies G (Left-Activist) and H (Hippie) were negligible, comprising only, respectively, 3% and 2% of the total responses.

However, there were considerable differences among the institutions studied regarding students' primary choices. At State College 78% of the total student sample selected as their primary responses Vocational (13%), Professional (25%) and Collegiate (40%) Student Philosophies; at Coalton College 67% selected Vocational (16%), Professional (23%) and Collegiate (28%) types; while at Ivy College, less than half of the students identified with Vocational (1%), Professional (21%) and Collegiate (27%) Philosophies. At the later institution, a large proportion of students saw themselves as Intellectuals (22%), while only a small percentage of students at the other

institutions so identified themselves.

TABLE I

Based on the combinations of first, second, and third choices to the Peterson typology, the average student response and percent was as follows: average student response for Professional (115) 17.6%; Collegiate (164) 25.0%; Academic (49) 7.5%; Intellectual (122) 18.6%; Vocational (86) 13.1%; Left-Activist (49) 7.5%; Hippie (32) 5.5%; and Ritualist (67) 10.2%.

Findings Pertaining to Research Questions

A one-way analysis of variance was performed on the data to determine if different types of students perceive the various dimensions of the IFI and the scales of SPIR differently. This analysis indicated that there only were significant differences among the different types of students on the Intellectual-Aesthetic, Freedom and Improvement of Society dimensions of the IFI, and only on Participation in Discussion and Consequence for Students scales of SPIR (Appendix I & II). Therefore, in order to determine if the various types of students perceive institutional functioning and student pressures for change differently (research questions one and two) means of student scores within and across colleges were compared. In order to answer research questions three and four, a one-way analysis of variance using data from each of the three institutions was performed for all students regardless of type of student.

Question 1

Student responses to the six IFI dimensions were analyzed in order to

determine if different types of students, as revealed by their primary responses to the Peterson typology, perceived various dimensions of institutional functioning differently. The mean student IFI item scores, by types and across colleges, are presented in Tables 2-7. In scoring the IFI, a response in a positive direction is scored as one (1), and the highest possible score for any one dimensions is twelve (12).

On the IAE (Intellectual-Aesthetic) scale of the IFI (Table 2), the mean student scores for different types of students across colleges varied from 7.54 to 8.50. Within colleges, the mean student score at State College varied from 6.80 to 8.64; at Ivy College from 9.33 to 10.40; and at Coalton, from 6.51 to 7.82. One immediately notices that differences between types of students are small and inconsistent across colleges. The average Ivy student scores regardless of type, are substantially higher and the average Coalton student regardless of type, scores relatively lower on this scale than did the average State student.

TABLE 2

On the F (Freedom) scale of the IFI (Table 3), the mean score for different types of students across colleges, varied from 5.46 to 6.60. Within colleges, the mean student score at State varied from 2.00 to 4.54; at Ivy from 10.50 to 11.69; and at Coalton, from 3.50 to 4.56. Again, we notice that the differences between types of students are small and inconsistent across colleges. Regardless of the type, the average Ivy student scored substantially higher and the average State student scores relatively lower on this scale than those of the average Coalton student.

TABLE 3

In analyzing the differences in mean student scores on the HD (Human Diversity) scale of the IFI (Table 4), for different types of students across colleges, the mean student scores varied from 5.26 to 5.96 Within colleges, the mean student score at State varied from 2.89 to 8.40; at Ivy from 8.00 to 8.67; and at Coalton from 4.17 to 5.28. The differences on this scale also are small for different types of students, and inconsistent across colleges. In all but one instance (the Hippie type at State College), the average Ivy student regardless of type, scored substantially higher than the average State and Coalton student scores.

TABLE 4

On the UL (Undergraduate-Learning) scale of the IFI (Table 5), the mean scores of different types of students across colleges varied from 6.06 to 7.19. Within colleges, the mean student scores at State varied from 3.68 to 5.87; at Ivy from 9.70 to 10.85; and at Coalton from 5.42 to 6.88. The differences between types of students are again noticeably small and there again is inconsistency across colleges. Regardless of the type of student, we again note that on this scale, the average Ivy student scores considerably higher than the average Coalton student and except for the Professional type, the average Coalton student scores somewhat higher than the average student at State College.

TABLE 5

On the IS (Improvement of Society) scale of the IFI (Table 6), the mean scores for different types of students across colleges varied from 3.86 to 5.30. Within colleges, the mean student score at State College varied from 1.80 to 4.26; at Ivy from 7.20 to 8.30; and at Coalton from 3.75 to 5.78. The differences between types of students are again small

and inconsistent across colleges. However, on this scale, regardless of the type of student, the average Ivy student scores substantially higher and the average State student noticeably lower than the average Coalton student.

TABLE 6

On the DG (Democratic Governance) scale of the IFI (Table 7), the mean scores for different types of students across colleges varied from 3.75 to 5.01. Within colleges, the mean student score at State College varied from 0.57 to 4.01; at Ivy from 7.78 to 9.52; and at Coalton from 2.25 to 4.24. Once again, the differences between types of students are small and inconsistent across colleges. As with the previous scales of the IFI analyzed, we again note that regardless of type, the average Ivy student scores substantially higher and the average State student scores somewhat lower on this scale than does the average student at Coalton College.

TABLE 7

While, as noted above, differences between types of students within colleges are not consistent, there seems to be one noteworthy trend. As one exams Tables 2-7, it can be seen that in almost all instances, at Coalton and State Colleges, students who identify themselves as Professional, Collegiate and Vocational types, and at Coalton only, also those who identify themselves as Ritualists, have the highest average mean scores on the IFI dimensions. These differences in average mean score on some of the IFI dimensions, and particularly Democratic-Governance, are quite substantial. This pattern does not occur at Ivy College.

Question 2

Student responses to the six SPIR scales were analyzed in order to determine if different types of students as revealed by their primary responses to the Peterson typology, perceive institutional response to student pressures for change differently. The mean student SPIR scale scores by type and across colleges are presented in Tables 8-13, the lowest possible score (indicating relative responsiveness of the institution for each of these scales is three (3), while the highest possible score (indicating relative non-responsiveness of the institution) is nine (9) for the first scale Consideration, and fifteen (15) for each of the remaining five scales.

On the Consideration scale of the SPIR (Table 8), the mean score of different types of students across colleges varied from 4.73 to 5.63. Within colleges, the mean student score at State College varied from 5.67 to 7.43; at Ivy from 3.20 to 4.00; and at Coalton from 5.29 to 6.33. On the scale of the SPIR, the Left-Activist type in all three institutions had the highest mean student scores. The Professional type had the lowest score at State and were among the lowest at the other institutions.

TABLE 8

An analysis of the Time scale on the SPIR (Table 9) indicates that the mean score of different types of students across colleges varied from 7.55 to 8.97. Within colleges, the mean student score at State College varied from 8.27 to 11.00; at Ivy from 4.52 to 6.50; and at Coalton from 9.05 to 12.00. On the scale the Left-Activist type at State and Coalton had the highest mean student scores while at Ivy, they were among the highest.

The Professional type in contrast, had the lowest mean student scores at Ivy and Coalton and were second lowest at State.

TABLE 9

On the Participation-Discussion scale of the SPIR (Table 10) the average score for different types of students across colleges varied from 6.22 to 7.21. Within colleges, the mean student score at State varied from 6.62 to 10.57; at Ivy from 3.00 to 3.94; and at Coalton from 7.00 to 9.00. An analysis of types of students within colleges on this scale of SPIR reveals, that the Left-Activist type had the highest mean student scores at State and Coalton Colleges, and the second highest mean student score at Ivy. For Ivy, the Ritualist type had the highest mean student score on this scale. There was no consistent pattern of low mean scores on this scale.

TABLE 10

The analysis of the Participation-Decision scale on the SPIR (Table 11) indicates that the mean score of different types of students across colleges varied from 7.46 to 9.49. Within colleges, the mean scores at State varied from 8.64 to 11.71; at Ivy from 4.20 to 6.83; and at Coalton from 9.50 to 13.00. For this scale of SPIR, the Left-Activist type at State and Coalton had the highest average score. For Ivy the Ritualist again had the highest mean score. The Professional type mean student scores were the lowest at State and Coalton and among the lowest at Ivy.

TABLE 11

On the Student Action scale of the SPIR (Table 12) the mean scores

for different types of students across colleges varied from 6.38 to 7.55. Within colleges, the mean score at State varied from 6.14 to 8.75; at Ivy from 5.00 to 7.00; and at Coalton from 5.86 to 7.79. For this scale of SPIR, the Left-Activist type had the highest mean scores at State and Ivy, while the Academics had the highest average score at Coalton. The Professional type had the lowest mean student scores at all three institutions.

TABLE 12

On the Consequence scale of the SPIR (Table 13) the analysis of the mean scores of different types of students across colleges varied from 6.75 to 8.35. Within colleges, the mean scores at State varied from 7.26 to 10.00; at Ivy from 4.58 to 6.60; and at Coalton from 6.98 to 10.33. On this scale, the Left-Activist type again had the highest mean score at all three institutions. The Professional type had the lowest mean score at State and Ivy and the second lowest at Coalton.

TABLE 13

Question 3

Student responses to the six IFI dimensions were analyzed in order to determine if the student respondents regardless of type, at the different institutions, perceived the dimensions of institutional functioning differently. The summary of mean IFI dimension scores by college are presented in Table 14. A one-way analysis of variance was performed. (Appendix III) In each case, the null hypothesis of no differences between the respective dimensions (Intellectual-Aesthetic, Freedom, Human Diversity,

Undergraduate-Learning, Improvement of Society, Democratic Covernance) was rejected at the .01 level of confidence.

TABLE 14

Question 4

Student responses to the six SPIR scales were analyzed in order to determine if the student respondents regardless of type at the different institutions, perceived institutional response to student pressures for change differently. The mean student SPIR scale scores by college are presented in Table 15. A one-way analysis of variance was performed. (Appendix IV) In each case, the null hypothesis of no differences between the respective scales (Consideration, Time, Participation in Discussion, Participation in Decision-Making, Student Actions and Consequences for Students) was rejected at the .01 level of confidence.

TABLE 15

Conclusions

Distribution of Student Respondents by Type and by Institution

As was expected, the largest number of students in this study identified with the Vocational, Professional, and Collegiate types in the Peterson Student Typology. This can be accounted for by the nature of two of the institutions investigated--State and Coalton Colleges. These institutions have a tradition of vocational and professional orientation in their curriculum, and their students are drawn from conservative backgrounds and have strong collegiate interests.

On the other hand, at Ivy College, as expected, we found a greater diversity in the students' patterns of identification. For instance, while almost half of the students at Ivy classified themselves as either Professional or Collegiate, one in five viewed himself as Intellectuals. The others were distributed among the Ritualists, Intellectuals, Left-Activist and Hippie types. Since Ivy's academic tradition essentially encourages and fosters a liberal intellectual atmosphere, heterogeneous types of students are attracted to Ivy, including many from liberal backgrounds.

Probably even those who identify themselves as Professional or Collegiate at Ivy view themselves quite differently than the same type of student at State and Coalton. For example, only a very few students at Ivy are committed to an Education major while at State, two out of five students are Education majors (Appendix V). There are no fraternities at Ivy and most extra-curricular activities are of an intellectual or social-action nature. This is not the case at the other institutions where

fraternities, sororities and intercollegiate athletics are actively supported. Similarly, although three out of four students at Ivy identified their political beliefs as liberal or left (Appendix V), less than one in ten identified himself with a Left-Activist or Hippie philosophy. It would seem therefore that a student's perception of the type of philosophy with which he most closely identifies is relative to climate that prevails on his campus. A politically liberal student at Ivy may not think of himself as holding a Left-Activist philosophy relative to other students on that campus, while students with a similar or more moderate political persuasion on another more traditional campus may identify with a Left-Activist philosophy. Similarly, a student engaged in intellectual or social action activities might consider himself a Collegiate at Ivy, while a student at another college would see the Collegiate philosophy more closely identified with fraternity members and enthusiastic supporters of intercollegiate sports activities.

Comparison of Means on the IFI by Types of Students

As we analyzed the several dimensions of the IFI, (Tables 2-7) the most obvious conclusion was that the difference between the mean scores of the various types of students were relatively small and inconsistent, especially as compared to the considerable and relative consistent differences found among institutions. Despite this, definite trends were noticalbe within the three institutions. Within colleges, substantially higher means were found for students who identified themselves as Professional, Collegiate, Vocational at both Coalton and State Colleges and for students who

identified themselves as Ritualists at Coalton. This would indicate greater satisfaction by these students with the way their institution functions than by other types of students at the same college.

The analysis of the IFI data from Ivy College indicates a considerably different pattern. First, the difference in average scores among the various types of students were extremely slight and followed no consistent pattern. In almost every instance the spread between average scores of different types of students on the various dimensions of the IFI were 1.0 or less. On the other hand, students at Ivy scored significantly higher, on the average, on every dimension of the IFI than did students at the other institutions across types, and in almost every instance within types. This difference probably would be attributed to the fact that students at Ivy perceive themselves quite differently than students at Coalton and State Colleges. The academic and intellectual climate at Ivy is apparently so much more open and liberal, and so ubiquitous that it reflects itself in the students perception of the institution, regardless of the variation in values held by the different types of students.

On the other hand, students at State and Coalton, are generally less satisfied with the functioning of their institution. At these latter institutions, those students, who are the least accepting of the prevailing American institutions (the Academics, Intellectuals, Left-Activist and Hippie) also see their institution as functioning less effectively than do those who are more accepting of prevailing American institutions (the Professionals, Vocationals, Collegiates and, at State, the Ritualists).

Comparison of Means on SPIR by Types of Students

As was the case in the analysis of the IFI results, the analysis of mean SPIR scores (Tables 8-13) also revealed relatively small differences among types of students as compared to institutional differences. However, there is somewhat greater consistency in the patterns of mean scale scores of SPIR among some of the different types of students. There is also greater variation in average SPIR scale scores among the different types of students than was found in the scores on the IFI dimensions.

The average mean scores on the SPIR scales indicated that Professional, Collegiate and Vocational types at State and Coalton, and the Ritualist type student at Coalton on most scales were more satisfied with the responsiveness of their institution to student pressures for change (i.e., they scored higher on the average on SPIR scales) than were Academic, Intellectual, Left-Activist and Hippie students at those institutions. This is similar to the pattern found in the IFI results. However, perhaps even more noteworthy, the Professionals at all three colleges scored either lowest or among the lowest on almost every scale of SPIR, while the Left-Activist scored either highest or among the highest on almost every scale. Thus, it would seem that among the various types of students at all three institutions, Professional students are most satisfied with the responsiveness of their institution to student pressures for change and Left-Activist are least satisfied.

This does not in any way take from the fact that institutional differences were far greater than differences between types on almost all SPIR scales. The mean SPIR scores at Coalton and State were about twice as great as the average score at Ivy on all scales except on the Student Action scale. This

pattern also is quite consistent between colleges within each type. There are no consistent differences between Coalton and State either overall or within types. However, the variation in mean scale scores between types is not as great as between institutions, although it is substantial at Coalton and State (the range on most scales varies about 3.0 on the average). The variation at Ivy College is greater on SPIR scales (about 2.0) than was found on the IFI dimensions (about 1.0). Thus, it would seem, that the climate of the college affects the students perception of his institution responsiveness to change more than does his identification with a particular student value system (at least as reflected in this student typology).

Statistical Differences between Means by Types of Students and between Means by Institutions

As previously discussed in the results section earlier, the one-way analysis of variance used to determine statistical differences between mean scores and types of students showed a general inconsistency. (Appendix I and II) Furthermore, the percent of variance accounted for by statistical strength (ω^2) indicates that the independent variable--types of students--were not strongly related to the dependent variable--student perceptions of institutional functioning characteristics (IFI) or of institutional response to student pressures for change (SPIR).

There were highly significant differences (at the .01 level of confidence) between mean scores for students by institution on all dimensions of the IFI and scales of SPIR. (Appendix III and IV) In addition, the percent of variance accounted for by statistical strength (ω^2) indicated a

relatively high relationship between the independent variable (institutions) and both dependent variables (IFI and SPIR scores).

These one-way analyses of variance seem to indicate that the student typology was of considerably less statistical value than was the college climate in explaining the variation in student perception of both the functioning of institutions and the responsiveness of institutions to student pressures for change. However, as will be discussed below, there are indications of trends regarding responses to the student typology worthy of further exploration. The high degree of statistical significance by institution was anticipated in the selection of the institutions and merely reflects that the institutions selected did indeed differ in the ways expected. Certainly, in the case of the IFI, all the prior research on this instrument would have been highly suspected had not these results been achieved. In the case of SPIR, it can be concluded that this instrument does reflect the differences in institutional climate of the three colleges selected in this exploratory study.

Conclusions Regarding IFI and SPIR by Institutions

As noted in our discussion of differences between types of students on both the IFI and SPIR, the pattern of institutional differences between mean scores on both instruments were much greater and much more consistent than were differences between types.

At Ivy College, the students are relatively satisfied with the way their institution functions. Ivy's students rated their institution substantially higher on all dimensions of the IFI than did students at the other colleges in this study. This would indicate that at Ivy, students feel that there is institutional freedom of expression and that there is

student involvement in institutional governance. We also conclude that Ivy students perceive their institution as a college that is concerned with teaching and learning, that has the qualities of an institution which is concerned with undergraduate learning and that is concerned with societal needs.

In contrast to Ivy, State students were generally dissatisfied with the way in which that institution functions. The students at State perceive their institution as being substantially lower on all dimensions of the IFI than did students at Ivy and somewhat lower on all but one dimension of the IFI (the Intellectual-Aesthetic dimension) than did students at Coalton College. Students at Coalton while relatively dissatisfied with their institution as compared to Ivy students, but were more satisfied than State students except on the Intellectual-Aesthetic dimension.

Our findings on SPIR indicate that Ivy students perceive their institution as relatively responsive to student pressures for change. On all six scales of SPIR, Ivy students were more satisfied with the institutional-student involvement in decision-making than were students at the other institutions. The differences were considerable on five of the six scales (mean student scores for Coalton and State students were almost twice as high as for Ivy students). However, the mean scale scores for Ivy students were only slightly lower on the Student Action scale than for Coalton students. State and Coalton College students were relatively dissatisfied with their institution's response to student pressures for change. Coalton students were more dissatisfied in terms of Time involvement, Participation in Discussion, Participation in Decision, and State students were more dissatisfied with Consideration, Student-Action,

and Consequence for Students. However, the differences between the perceptions of students at these latter institutions were relatively small.

The results of this study seem to suggest that at least as far as the institutions investigated, that the climate, ethos, and style of an institution has a definite effect upon the way it responds to student pressures for change in higher education. Based upon the instruments used in this investigation, it would seem that if students perceive their institution as interested in the development of its students, as open in its modus-operandi, and otherwise functioning to meet the needs of students, than students will perceive their institution as being more responsive to student pressures for change. This was especially evident at Ivy College which has a liberal, open viewpoint regarding institutional functioning. Generally, from the findings on the IFI dimensions and SPIR scales, we conclude that the greater proportion of students at Ivy are relatively satisfied in the way their institution functions and the receptiveness of their institution to requests for change and to the implementation of these requests. This was not the view generally held by students at State or Coalton. Students at both of these institutions perceive their colleges as not being responsive to student pressures for change and they are generally not satisfied with the way their institution functions.

There are indications from these data that, at State and Coalton at least, those students who identify most closely with Professional, Collegiate and Vocational values and students at Coalton who identify with Ritualist values, are most satisfied with the functioning of their institution as compared to other types of students. A similar trend is found in regard to perceptions of institutional response to student pressures

for change. However, there were indications that Professional types of students were most satisfied and Left-Activists least satisfied with their institutions' responsiveness.

In view of the fact that the institutions investigated in this study are not representative of all four-year colleges, and because the Peterson Student Typology and Student Perceptions of Institutional Response instruments are experimental in nature, the results of this study must be viewed as exploratory only. However, based on the institutions studied, the results of this research suggests that the total student culture of a campus has greater effect on how students perceive the functioning of an institution and responsiveness of an institution to change than does their identification with particular types of student value systems within their college. There are indications from these data that student values in combination with institutional climate make very potent indicators of student perceptions. However, substantiation of this conclusion would require further study with considerably larger numbers of students and institutions.

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TABLE I

Response Frequencies by Types of Students and Institution

INSTITUTION	STATE		IVY		COALTON		TOTAL	
STUDENT TYPES	N	%	N	%	N	%	N	%
VOCATIONAL	42	(13)	1	(1)	29	(16)	72	(11)
PROFESSIONAL	78	(25)	33	(21)	43	(23)	154	(24)
COLLEGIATE	125	(40)	41	(27)	51	(28)	217	(33)
RITUALIST	28	(9)	18	(12)	18	(10)	64	(10)
ACADEMIC	9	(3)	13	(3)	14	(8)	36	(5)
INTELLECTUAL	23	(8)	34	(22)	24	(13)	81	(12)
LEFT-ACTIVIST	7	(2)	10	(6)	3	(2)	20	(3)
HIPPIE	5	(2)	5	(3)	1	(0)	11	(2)
TOTAL	317		155		183		655	

TABLE 2

Summary of Mean Student Scores
by Types of Students and by Institutions,
Intellectual-Aesthetic Dimension of the Institutional Functioning Inventory

COLLEGE		Professional	Collegiate	Academic	Intellectual	Vocational	Left-Activist	Hippie	Ritualist	TOTAL
STATE	N	78	125	9	23	42	7	5	28	317
	$\bar{x}$	8.64	8.36	7.22	7.39	8.02	8.43	6.80	7.29	8.16
IVY	N	33	41	13	34	*	10	5	18	155
	$\bar{x}$	10.33	10.29	10.39	10.38		9.60	10.40	9.33	10.17
COALTON	N	43	51	14	24	29	3	*	18	183
	$\bar{x}$	6.51	7.82	6.07	6.25	6.76	5.00		6.94	6.87
TOTAL	N	154	217	36	81	72	20	11	64	655
	$\bar{x}$	8.41	8.50	7.92	8.31	7.54	8.50	8.46	7.77	8.28

* N is less than three (3)

TABLE 3

Summary of Mean Student Scores
by Types of Students and by Institutions,
Freedom Dimension of the Institutional Functioning Inventory

COLLEGE		Professional	Collegiate	Academic	Intellectual	Vocational	Left-Activist	Hippie	Ritualist	TOTAL N $\bar{x}$
STATE	N	78	125	9	23	42	7	5	28	317
	$\bar{x}$	4.54	3.98	2.22	2.87	4.07	2.00	2.20	3.50	3.88
IVY	N	33	41	13	34	*	10	5	18	155
	$\bar{x}$	10.79	11.34	11.69	11.12		10.50	10.80	10.94	11.08
COALTON	N	43	51	14	24	29	3	*	18	183
	$\bar{x}$	4.56	4.37	4.36	3.50	4.41	4.33		3.72	4.22
TOTAL	N	154	217	36	81	72	20	11	64	655
	$\bar{x}$	5.88	5.46	6.47	6.52	4.29	6.60	6.00	5.66	5.68

*
N is less than three (3)

TABLE 4

Summary of Mean Student Scores
by Types of Students and by Institutions,
Human-Diversity Dimension of the Institutional Functioning Inventory

COLLEGE		Professional	Collegiate	Academic	Intellectual	Vocational	Left-Activist	Hippie	Ritualist	TOTAL N $\bar{x}$
STATE	N	78	125	9	23	42	7	5	28	317
	$\bar{x}$	5.05	5.02	2.89	3.74	5.10	3.43	8.40	3.89	4.71
IVY	N	33	41	13	34	*	10	5	18	155
	$\bar{x}$	8.24	8.39	8.08	8.44		8.00	8.40	8.67	8.37
COALTON	N	43	51	14	24	29	3	*	18	183
	$\bar{x}$	4.67	4.63	4.36	4.58	5.28	3.33		4.17	4.65
TOTAL	N	154	217	36	81	72	20	11	64	655
	$\bar{x}$	5.63	5.57	5.33	5.96	5.26	5.70	5.27	5.31	5.56

*
N is less than three (3)

TABLE 5

Summary of Mean Student Scores
by Types of Students and by Institutions,
Undergraduate-Learning Dimension of the Institutional Functioning Inventory

COLLEGE		Professional	Collegiate	Academic	Intellectual	Vocational	Left-Activist	Hippie	Ritualist	TOTAL N	TOTAL $\bar{x}$
STATE	N	78	125	9	23	42	7	5	28	317	
	$\bar{x}$	5.87	5.27	5.00	3.83	5.21	3.71	4.00	3.68		5.12
IVY	N	33	41	13	34	*	10	5	18	155	
	$\bar{x}$	10.85	10.37	10.31	10.44		9.70	10.80	10.00		10.41
COALTON	N	43	51	14	24	29	3	*	18	183	
	$\bar{x}$	5.74	6.88	5.71	5.42	6.41	5.00		5.83		6.13
TOTAL	N	154	217	36	81	72	20	11	64	655	
	$\bar{x}$	6.90	6.61	7.19	7.07	5.76	6.90	7.73	6.06		6.65

*
N is less than three (3)

TABLE 6

Summary of Mean Student Scores
by Types of Students and by Institutions,
Improvement of Society Dimension of the Institutional Functioning Inventory

COLLEGE		Professional	Collegiate	Academic	Intellectual	Vocational	Left-Activist	Hippie	Ritualist	TOTAL N	TOTAL $\bar{x}$
STATE	N	78	125	9	23	42	7	5	28	317	
	$\bar{x}$	4.26	3.72	2.33	2.30	3.19	1.86	1.80	2.36		3.45
IVY	N	33	41	13	34	*	10	5	18	155	
	$\bar{x}$	8.21	7.66	8.23	8.27		8.30	7.20	7.72		7.99
COALTON	N	44	51	14	24	29	3	*	18	183	
	$\bar{x}$	4.65	4.77	4.14	3.75	4.72	3.33		5.78		4.6?
TOTAL	N	154	217	36	81	72	20	11	64	655	
	$\bar{x}$	5.21	4.71	5.17	5.24	3.86	5.30	4.55	4.83		4.85

*
N is less than three (3)

TABLE 7

Summary of Mean Student Scores
by Types of Students and by Institutions,
Democratic-Governance Dimension of the Institutional Functioning Inventory

COLLEGE		Professional	Collegiate	Academic	Intellectual	Vocational	Left-Activist	Hippie	Ritualist	TOTAL N	TOTAL $\bar{x}$
STATE	N	78	125	9	23	42	7	5	28	317	
	$\bar{x}$	4.01	3.39	0.89	1.65	3.41	0.57	0.80	1.54		3.08
IVY	N	33	41	13	34	*	10	5	18	155	
	$\bar{x}$	9.52	8.95	9.31	9.03		8.40	8.60	7.78		8.90
COALTON	N	44	51	14	24	29	3	*	18	183	
	$\bar{x}$	3.37	3.88	2.93	2.25	4.24	1.67		3.50		3.47
TOTAL	N	154	217	36	81	72	20	11	64	655	
	$\bar{x}$	5.01	4.56	4.72	4.93	3.75	4.65	4.73	3.84		4.57

*
N is less than three (3)

TABLE 8

Summary of Mean Student Scores
by Types of Students and by Institutions,
Consideration Scale of the Student Perceptions of Institutional Response

COLLEGE		Professional	Collegiate	Academic	Intellectual	Vocational	Left-Activist	Hippie	Ritualist	TOTAL N	TOTAL $\bar{x}$
STATE	N	78	125	9	23	42	7	5	28	317	
	$\bar{x}$	5.67	6.00	6.56	6.44	5.81	7.43	6.00	6.29		6.00
IVY	N	33	41	13	34	*	10	5	18	155	
	$\bar{x}$	3.64	3.42	3.54	3.59		4.00	3.20	3.94		3.60
COALTON	N	43	51	14	24	29	3	*	18	183	
	$\bar{x}$	5.88	5.73	5.29	5.88	5.45	6.33		6.00		5.74
TOTAL	N	154	217	36	81	72	20	11	64	655	
	$\bar{x}$	5.29	5.45	4.97	5.07	5.63	5.55	4.73	5.54		5.36

*
N is less than three (3)

TABLE 9

Summary of Mean Student Scores
by Types of Students and by Institutions,
Time Scale of the Student Perception of Institutional Response

COLLEGE		Professional	Collegiate	Academic	Intellectual	Vocational	Left-Activist	Hippie	Ritualist	TOTAL N	TOTAL $\bar{x}$
STATE	N	78	125	9	23	42	7	5	28	317	
	$\bar{x}$	8.54	8.27	9.44	9.57	8.71	11.00	9.20	9.68		8.72
IVY	N	33	41	13	34	*	10	5	18	155	
	$\bar{x}$	4.52	5.63	5.08	5.85		5.80	5.40	6.50		5.48
COALTON	N	43	51	14	24	29	3	*	18	183	
	$\bar{x}$	9.05	9.92	10.50	10.17	9.48	12.00		9.39		9.71
TOTAL	N	154	217	36	81	72	20	11	64	655	
	$\bar{x}$	7.82	8.16	8.28	8.19	8.97	8.55	7.55	8.70		8.23

*
N is less than three (3)

TABLE 10

Summary of Mean Student Scores
by Types of Students and by Institutions,
Participation-Discussion Scale of the Student Perceptions of Institutional Response

COLLEGE		Professional	Collegiate	Academic	Intellectual	Vocational	Left-Activist	Hippie	Ritualist	TOTAL N	TOTAL $\bar{x}$
STATE	N	78	125	9	23	42	7	5	28	317	
	$\bar{x}$	6.62	7.19	9.11	8.91	6.79	10.57	9.80	8.86		7.44
IVY	N	33	41	13	34	*	10	5	18	155	
	$\bar{x}$	3.42	3.42	3.46	3.41		3.90	3.00	3.94		3.50
COALTON	N	43	51	14	24	29	3	*	18	183	
	$\bar{x}$	7.65	7.26	7.71	8.67	7.00	9.00		7.56		7.58
TOTAL	N	154	217	36	81	72	20	11	64	655	
	$\bar{x}$	6.22	6.49	6.53	6.53	6.82	7.00	6.36	7.21		6.55

*
N is less than three (3)

TABLE 11

Summary of Mean Student Scores
by Types of Students and by Institutions,
Participation-Decision Scale of the Student Perception of Institutional Response

COLLEGE		Professional	Collegiate	Academic	Intellectual	Vocational	Left-Activist	Hippie	Ritualist	TOTAL N	TOTAL $\bar{x}$
STATE	N	78	125	9	23	42	7	5	28	317	
	$\bar{x}$	8.64	9.12	9.78	10.47	9.14	11.71	10.00	10.82		9 34
IVY	N	33	41	13	34	*	10	5	18	155	
	$\bar{x}$	5.55	5.81	5.39	5.94		6.50	4.20	6.83		5.88
COALTON	N	43	51	14	24	29	3	*	18	183	
	$\bar{x}$	9.67	9.84	9.50	11.63	10.00	13.00		10.67		10.18
TOTAL	N	154	217	36	81	72	20	11	64	655	
	$\bar{x}$	8.27	8.66	8.08	8.91	9.49	9.30	7.46	9.66		8.76

*
N is less than three (3)

TABLE 12

Summary of Mean Student Scores
by Types of Students and by Institutions,
Student-Action Scale of the Student Perception of Institutional Response

COLLEGE		Professional	Collegiate	Academic	Intellectual	Vocational	Left-Activist	Hippie	Ritualist	TOTAL N	TOTAL $\bar{x}$
STATE	N	78	125	9	23	42	7	5	28	317	
	$\bar{x}$	6.14	6.90	7.00	8.39	6.50	8.00	8.20	8.75		6.98
IVY	N	33	41	13	34	*	10	5	18	155	
	$\bar{x}$	5.00	5.46	5.15	5.38		7.00	5.60	5.67		5.43
COALTON	N	43	51	14	24	29	3	*	18	183	
	$\bar{x}$	5.86	7.12	7.79	7.58	7.69	6.00		7.56		5.54
TOTAL	N	154	217	36	81	72	20	11	64	655	
	$\bar{x}$	6.38	6.68	6.64	6.89	6.93	7.20	7.18	7.55		6.77

*
N is less than three (3)

TABLE 13

Summary of Mean Student Scores
by Types of Students and by Institutions,
Consequence Scale of the Student Perceptions of Institutional Response

COLLEGE		Professional	Collegiate	Academic	Intellectual	Vocational	Left-Activist	Hippie	Ritualist	TOTAL N	TOTAL $\bar{x}$
STATE	N	78	125	9	23	42	7	5	28	317	
	$\bar{x}$	7.26	7.76	9.67	9.13	8.21	10.00	9.40	8.61		8.00
IVY	N	33	41	13	34	*	10	5	18	155	
	$\bar{x}$	4.58	5.22	5.23	5.18		6.60	4.80	6.00		5.24
COALTON	N	43	51	14	24	29	3	*	18	183	
	$\bar{x}$	7.49	6.98	8.21	8.33	8.35	10.33		8.06		7.74
TOTAL	N	154	217	36	81	72	20	11	64	655	
	$\bar{x}$	6.75	7.10	7.50	7.24	8.22	8.35	7.00	7.72		7.28

*
N is less than three (3)

TABLE 14

Summary of Mean Student IFI Dimension
Scores Regardless of Types of
Students by Institution

IFI DIMENSIONS / INSTITUTIONS	IAE	F	MD	UL	IS	DG	
STATE	8.16	3.88	4.71	5.12	3.45	3.08	N=317
IVY	10.17	11.08	8.37	10.41	7.99	8.90	N=155
COALTON	6.87	4.22	4.65	6.13	4.63	3.47	N=183
GRAND MEAN	8.28	5.68	5.56	6.65	4.85	4.57	N=655

TABLE 15

Summary of Mean Student SPIR Scale Scores Regardless of Types of Students by Institution

SPIR SCALES							
INSTITUTIONS	CONSID	TIME	PRTDIS	PRTDIM	STDACT	CONQST	
STATE	6.00	8.72	7.44	9.34	6.98	8.00	N=317
IVY	3.60	5.48	3.50	5.88	5.43	5.24	N=155
COALTON	5.74	9.71	7.58	10.18	5.54	7.74	N=183
GRAND MEAN	5.36	8.23	6.55	8.76	6.77	7.28	N=655

APPENDIX I

Analysis of Variance between Types of Students
and the Three Institutions on the
Various Dimensions of the Institutional Functioning Inventory

Dimensions of IFI	Source of Variance	D.F.	S.S.	M.S.	F.	Significance	Est. ω^2
Intellectual-Aesthetic	Types of students	7	78.696	12.42	2.19	.05	<.01
	Error within	647	3664.47	5.66			
	TOTAL	654	3751.53				
Freedom	Types of students	7	253.2	36.17	2.83	.01	..02
	Error within	647	8267.1	12.78			
	TOTAL	654	8520.3				
Human-Diversity	Types of students	7	27.30	3.90	0.53	N/S	..01
	Error within	647	4794.19	7.41			
	TOTAL	654	4821.49				
Undergraduate-Learning	Types of students	7	128.0	18.29	1.81	N/S	..01
	Error within	647	6546.9	10.12			
	TOTAL	654	6674.9				
Improvement of Society	Types of students	7	115.8	16.54	2.03	.05	<.01
	Error within	647	5286.8				
	TOTAL	654	5402.6				
Democratic-Governance	Types of students	7	132.9	17.70	1.27	N/S	<.003
	Error within	647	9047.0	13.98			
	TOTAL	654	9170.9				

APPENDIX II

Analysis of Variance between Types of Students and the Three Institutions on the Various Scales of the Student Perceptions of Institutional Response

Scales of SPIR	Source of Variance	D.F.	S.S.	M.S.	F.	Significance	Est. ω^2
Consideration	Types of students	7	26.80	3.83	1.51	N/S	<.005
	Error within	647	1639.89	2.54			
	TOTAL	654	1666.69				
Time	Types of students	7	88.57	12.653	1.53	N/S	<.006
	Error within	647	5352.69	8.273			
	TOTAL	654	5441.26				
Participation - in Discussion	Types of students	7	47.11	6.73	0.61	N/S	<.004
	Error within	647	7155.31	11.06			
	TOTAL	654	7302.42				
Participation - in Decision	Types of students	7	171.9	24.56	2.33	.05	<.014
	Error within	647	6833.0	10.56			
	TOTAL	654	7004.9				
Student Action	Types of students	7	73.50	10.50	1.07	N/S	<.0007
	Error within	647	6331.23	9.79			
	TOTAL	654	6404.73				
Consequence for Students	Types of students	7	153.0	21.85	3.03	.01	<.021
	Error within	647	4667.6	7.21			
	TOTAL	654	4820.6				

APPENDIX III

Analysis of Variance between the Three Institutions
Regardless of Type of Student on the
Various Dimensions of the Institutional Functioning Inventory

Dimensions of IFI	Source of Variance	D.F.	S.S.	M.S.	F.	Significance	Est. ω^2
Intellectual-Aesthetic	College	2	924.8	462.41	106.66	.01	<.24
	Error within	652	2826.6	4.34			
	TOTAL	654	3751.4				
Freedom	College	2	5927.	2963.37	744.97	.01	<.69
	Error within	652	2594.	3.98			
	TOTAL	654	8521.				
Human-Diversity	College	2	1610.	804.93	163.41	.01	<.33
	Error within	652	3212.	4.93			
	TOTAL	654	4822.				
Undergraduate-Learning	College	2	2983.	1491.38	263.36	.01	<.44
	Error within	652	3692.	5.66			
	TOTAL	654	6675.				
Improvement of Society	College	2	2158.	1078.77	216.75	.01	<.40
	Error within	652	3245.	4.98			
	TOTAL	654	5403.				
Democratic-Governance	College	2	3836.	1917.96	234.40	.01	<.42
	Error within	652	5335.	8.18			
	TOTAL	654	9171.				

APPENDIX IV

Analysis of Variance between the Three Institutions Regardless of Type of Student on the Various Scales of the Student Perceptions of Institutional Response

Scales of SPIR	Source of Variance	D.F.	S.S.	M.S.	F.	Significance	Est. ω^2
Consideration	College	2	635.6	317.78	200.94	.01	.38
	Error within	652	1031.1	1.58			
	TOTAL	654	1666.7				
Time	College	2	1633.	816.44	139.76	.01	.30
	Error within	652	3808.	5.84			
	TOTAL	654	5441.				
Participation - in Discussion	College	2	1889.	944.51	115.90	.01	.26
	Error within	652	5313.	8.144			
	TOTAL	654	7202.				
Participation - in Decision	College	2	1762.	881.16	109.59	.01	.25
	Error within	652	5243.	8.04			
	TOTAL	654	7005.				
Student Action	College	2	398.3	199.16	21.62	.01	.06
	Error within	652	6008.4	9.21			
	TOTAL	654	6406.7				
Consequence for Students	College	2	849.4	424.72	69.73	.01	.17
	Error within	652	3971.1	6.09			
	TOTAL	654	4820.5				

APPENDIX V

Response Frequency (in percent) of students by Institution on the Demographic Variables

Demographic Variable \ College	State	Ivy	Coalton	All Students Total
1. Sex				
Male	51.4	94.2	50.3	61.2
Female	48.3	4.5	47.5	37.7
2. Age				
18	5.7	8.4	6.0	6.4
19	26.8	29.7	21.9	26.1
20	38.5	29.7	26.2	33.0
21	19.6	24.5	31.1	24.0
21 or over	9.5	7.1	13.7	10.1
3. Class Standing				
Sophomore	33.4	34.2	20.8	30.1
Junior	38.5	34.2	33.9	36.2
Senior	25.6	29.0	37.2	29.6
4. Residence				
University housing	59.0	95.5	42.1	62.9
Off-campus	24.0	1.9	7.7	14.2
Parents or family	12.9	.0	48.6	19.8
Other	3.2	11.9	1.1	2.3
5. Major Field				
Science	8.8	21.3	21.3	15.3
Social Science	16.1	34.8	23.0	22.4
Humanities/Fine Arts	6.6	29.0	17.5	15.0
Education	42.9	1.3	8.2	23.4
Business	13.6	1.9	16.4	11.6
Other	10.7	9.7	10.9	10.5
6. Community of Origin				
Large city	7.3	31.6	7.7	13.1
Medium city	16.1	11.0	24.0	17.1
Small city/suburban area	25.6	34.2	29.0	28.7
Small city/not suburban	35.6	14.8	26.2	28.1
Farm/village/not suburban	14.2	5.8	9.8	11.0
7. Father's Education				
Grade school	8.5	6.5	13.7	9.5
Some high school	19.6	2.6	18.6	15.3
Finish - high school	31.5	11.0	32.2	26.9
Some college	19.2	11.6	11.5	15.3
Finish - college	19.6	67.7	22.5	31.8

College / Demographic Variable	State	Ivy	Coalton	All Students Total
8. Father's Occupation				
Executive - Manager - Owner business	30.0	36.8	29.0	31.3
Semi-skilled worker	25.2	5.2	20.8	19.2
Skilled worker/foreman	17.7	6.5	19.7	15.6
Clerical/salesman	10.1	3.2	10.9	8.7
Professional	14.8	47.7	16.4	23.1
9. Student's Grade Point Average				
Less than C-	4.1	1.9	14.8	6.6
C+	46.7	8.4	32.2	33.6
B-	30.3	30.3	31.1	30.5
B+/A	17.7	47.1	19.1	25.0
10. Student's Political Belief				
Conservative	22.4	7.1	21.3	18.5
Middleroad	42.0	9.0	32.2	31.5
Liberal	30.3	45.2	38.2	36.0
Left	3.2	32.3	4.4	10.4
11. Religious Preference				
Protestant	38.2	26.5	25.1	31.8
Catholic	34.7	4.5	38.3	28.5
Other	9.1	26.5	12.0	14.0
None	10.4	34.8	12.6	16.8
Prefer-not-to-answer	6.3	5.2	7.7	6.4
12. Race				
White	92.7	83.2	85.8	88.5
Other	1.3	7.7	2.7	3.2
Prefer-not-to-answer	4.4	3.9	6.0	4.7